

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Previously presented) A lubricant concentrate comprising an effective lubricating amount of at least one ether carboxylate and at least one defoamer, wherein said at least one defoamer is a C₉ to C₁₁ propoxylated alcohol, and wherein said defoamer reduces initial foam and 5-minute foam.
2. (Currently amended) The lubricant concentrate of claim 1 wherein said at least one ether carboxylate has the following general formula:
$$R-(OCH_2CH_2)_n-OCH_2COO-X$$
Where X is an alkali metal, amine, alkanolamine, either ether diamine, ammonium salt or H (free acid), and R is a linear or branched C₁₆- C₁₈ alkyl group.
3. (Original) The lubricant concentrate of claim 1 wherein said at least one ether carboxylate is a C₁₂ to C₁₈ ether carboxylate.
4. (Original) The lubricant concentrate of claim 1 wherein said at least one ether carboxylate is a C₁₆ to C₁₈ ether carboxylate.
5. - 8. (Canceled)
9. (Original) The lubricant concentrate of claim 1, said ether carboxylate having about 3 to about 20 moles ethoxylation.
10. (Original) The lubricant concentrate of claim 1, said ether carboxylate having about 5 to about 15 moles ethoxylation.

11. (Original) The lubricant concentrate of claim 1 wherein said ether carboxylate has 10 moles ethoxylation.

12. (Previously presented) The lubricant concentrate of claim 1, said ether carboxylate having about 3 to about 20 moles propoxylation.

13. (Previously presented) The lubricant concentrate of claim 1, said ether carboxylate having about 2 to about 10 moles propoxylation.

14. (Original) The lubricant concentrate of claim 1, said ether carboxylate having about 5 to about 15 moles ethoxylation and about 2 to about 10 moles propoxylation.

15. (Original) The lubricant concentrate of claim 1 wherein said ether carboxylate is present at a concentration of about 0.1 wt-% to about 75 wt-%.

16. (Original) The lubricant concentrate of claim 1, wherein said ether carboxylate is present at a concentration of about 0.25 to 50 wt-%.

17. (Previously presented) The lubricant concentrate of claim 1, wherein said ether carboxylate is present at a concentration of about 0.5 wt-% to about 15 wt-%.

18. (Previously Presented) The lubricant concentrate of claim 1 further comprising at least one corrosion inhibitor.

19. (Previously Presented) The lubricant concentrate of claim 18, wherein said at least one corrosion inhibitor is selected from the group consisting of: an ether diamine, a dicarboxylic acid or salt thereof, at least one amine oxide, or mixtures thereof.

20. (Previously Presented) The lubricant concentrate of claim 19, wherein said corrosion inhibitor is an ether diamine having the following general formula:

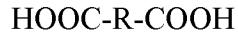


wherein R₁ may be a linear C₆-C₁₈ alkyl group, R₂ may be a linear or branched C₁-C₁₈ alkyl group, and R₃ is a linear or branched C₁-C₈ alkyl group.

21. (Previously Presented) The lubricant concentrate of claim 20, wherein said ether diamine is selected from the group consisting of isododecyloxypropyl-1,3-diamino propane, dodecyloxypropyl-1,3-diamino propane, tetradecyloxypropyl-1,3-diamino propane, isotridecyloxypropyl-1,3-diaminopropane and mixtures thereof.

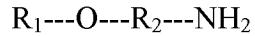
22. (Previously Presented) The lubricant concentrate of claim 20, wherein said ether diamine is a mixture of dodecyloxypropyl-1,3-diaminopropane and tetradecyloxypropyl-1,3-diaminopropane.

23. (Previously Presented) The lubricant concentrate of claim 19 wherein said corrosion inhibitor is a dicarboxylic acid or salt thereof having the following general formula:

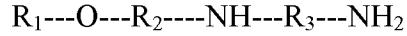


where R is an alkyl group having from about 1 to about 8 carbon atoms.

24. (Previously Presented) The lubricant concentrate of claim 23 further in combination with an ether amine or diamine having the following general formula:



and



and mixtures thereof, where R₁ is a linear C₆-C₁₈ alkyl group, R₂ is linear or branched C₁-C₈ alkyl group, and R₃ is linear or branched C₁-C₈ alkyl group.

25. (Original) The lubricant concentrate of claim 24 further comprising at least one phosphonated amine oxide.

26. (Original) The lubricant concentrate of claim 1 further comprising at least one member selected from the group consisting of surfactants, hydrotropes, antimicrobial agents, viscosity

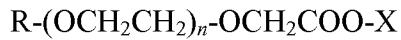
modifiers, soil anti-redeposition agents, preservatives, dyes, fragrances, anti-foaming agents, soil suspension agents, solubilizing agents, penetrants, and mixtures thereof.

27. (Original) The lubricant concentrate of claim 1, further diluted with water to a concentration of about 0.1 wt-% to about 10 wt-% of said concentrate in water.

28. (Original) The lubricant concentrate of claim 1, further diluted with water to a concentration of about 0.4 wt-% to about 10 wt-% of said concentrate in water.

29. (Original) A lubricated conveyer or container, having a lubricant coating on a container-contacting surface of the conveyor or on a conveyor-contacting surface of the container, wherein the coating comprises the lubricant composition of claim 1.

30. (Previously Presented) An aqueous conveyer lubricant composition comprising from about 0.1 wt-% to about 50 wt-% of at least one ether carboxylate having the following general formula:



where X is an alkali metal, amine, alkanolamine, ether diamine, ammonium salt or H (free acid), R is a linear or branched C₁₆-C₁₈ alkyl group, and at least one foam destabilizer, wherein said at least one foam destabilizer is a C₉ to C₁₁ propoxylated alcohol, and wherein the foam destabilizer reduces initial foam and 5-minute foam.

31. - 34. (Canceled)

35. (Original) The aqueous conveyer lubricant of claim 30, said ether carboxylate having about 3 to about 20 moles alkoxylation.

36. (Original) The aqueous conveyer lubricant of claim 30, said ether carboxylate having about 5 to about 15 moles alkoxylation.

37. (Canceled)

38. (Original) The aqueous conveyer lubricant of claim 30 wherein said ether carboxylate has 10 moles of ethoxylation.

39. (Currently Amended) The aqueous conveyer lubricant of claim 30 comprising 0.5 wt-% to 15 wt-% of said ether carboxylate.

40. (Original) The aqueous conveyer lubricant of claim 30 further comprising at least one corrosion inhibitor.

41. (Original) The aqueous conveyer belt lubricant composition of claim 40, said at least one corrosion inhibitor is an ether diamine, a dicarboxylic acid or salt thereof, an amine oxide, or mixture thereof.

42. (Original) The aqueous conveyer lubricant of claim 30 further comprising at least one member selected from the group consisting of preservatives, surfactants, hydrotropes, antimicrobial agents, viscosity modifiers, soil anti-redeposition agents, dyes, fragrances, soil suspension agents, solubilizing agents, penetrants, and mixtures thereof.

43. (Original) The aqueous conveyer lubricant of claim 30 further diluted with water to a concentration of about 0.1 wt-% to about 10 wt-% of said lubricant in water.

44. (Previously Presented) A method of lubricating the interface between a container and a moving conveyor surface, the method comprising the steps of:

- a) providing a lubricant composition comprising at least one ether carboxylate lubricant and at least one foam destabilizer, wherein said at least one foam destabilizer is a C₉ to C₁₁ propoxylated alcohol, and wherein the foam destabilizer reduces initial foam and 5-minute foam; and
- b) applying said lubricant composition to said conveyor surface.

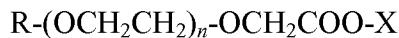
45. (Previously Presented) The method of claim 44 wherein said applying step comprises applying said lubricant composition to said conveyor surface by means of a plurality of spray nozzles spaced along said conveyor surface.

46. (Original) The method of claim 44 wherein said lubricant composition is in the form of a concentrate.

47. (Original) The method of claim 46 further comprising the step of diluting said concentrate with water at a ratio of about 1 to about 1000 parts water to 1 part concentrate.

48. (Original) The method of claim 46 further comprising the step of diluting said concentrate water at a ratio of about 1 to about 500 parts water to about 1 part concentrate.

49. (Previously Presented) The method of claim 44, said ether carboxylate having the following general formula:



where X is an alkali metal, amine, alkanolamine, ether diamine, ammonium salt or H (free acid), R is a linear or branched C₁₆-C₁₈ alkyl group, and at least one foam destabilizer.

50. (Canceled)

51. (Original) The method of claim 44, said ether carboxylate present at a concentration of about 0.5 wt-% to about 15 wt-%.

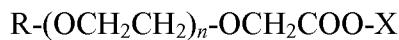
52. - 55. (Canceled)

56. (Original) The method of claim 44 wherein said lubricant composition further comprises at least one ether diamine, at least one dicarboxylic acid or salt thereof, or mixtures thereof.

57. (Previously Presented) A method of lubricating a conveyor system comprising the steps of:

- a) diluting a lubricant concentrate with water to form an aqueous lubricant use-solution comprising an effective lubricating amount of at least one ether carboxylate and foam destabilizer, wherein said foam destabilizer is a C₉ to C₁₁ propoxylated alcohol, and wherein the foam destabilizer reduces initial foam and 5-minute foam; and
- b) applying said lubricant use-solution composition to the intended surface of use.

58. (Previously Presented) The method of claim 57, said ether carboxylate having the following general formula:



where X is an alkali metal, amine, alkanolamine, ether diamine, ammonium salt or H (free acid) and R is a linear or branched C₁₆-C₁₈ alkyl group.

59. - 63. (Canceled)

64. (Original) The method of claim 57, said lubricant concentrate further comprising at least one corrosion inhibitor.

65. (Original) The method of claim 64, said corrosion inhibitor comprising at least one ether diamine, at least one dicarboxylic acid or salt thereof, amine oxide or mixtures thereof.

66. (Original) The method of claim 57 further comprising the step of diluting said lubricant concentrate with water to a concentration of about 0.1 to about 10 wt-% of said lubricant concentrate in water.

67. (Previously Presented) A method for lubricating a continuously-moving conveyor system for transporting packages, said conveyor system being wetted with an aqueous lubricant composition comprising at least one ether carboxylate lubricant and at least one foam destabilizer, wherein said at least one foam destabilizer is a C₉ to C₁₁ propoxylated alcohol, and wherein the foam destabilizer reduces initial foam and 5-minute foam.

68. (Canceled)

69. (Original) The method of claim 67 further comprising at least one corrosion inhibitor.

70. (Original) The method of claim 69, said corrosion inhibitor comprising at least one ether diamine, at least one dicarboxylic acid or salt thereof, amine oxide or mixtures thereof.